Observations on a gathering of *Thaumatomyia notata* Mg. (Dipt.) in Cardiganshire

Following the warmest August on record, 1990 experienced very little rain, falling only on seven days in July and twelve in August, at Cnwch Coch, near Aberystwyth, Cardiganshire, Wales, which at 122m above sea level is located in an agricultural area of predominantly permanent pasture with forestry. Gathering of *Thaumatomyia notata* Mg. is not observed every year in autumn, when it does occur the fly frequently causes a public nuisance by invading domestic premises in very large numbers, usually mentioned in the press in only the broadest terms. This habit of gathering together has been mentioned by several authors referred to by Oldroyd, *The natural history of flies*, Weidenfield, 1964.

On 13.ix.1990 a gathering of *T. notata* had formed by 12.00 hours, BST at a height extending from four (1.2m) to six (1.8m) feet from the ground above a pathway in a sheltered but open space surrounded by hedgerows and shrubs in front of a south-facing conservatory. Details of climatic conditions prevailing at the time are given in Table 1.

Adult flies have a characteristic slow moving flight pattern and the group of flies drift in the eddying air, moving up and down, to and fro. Sometimes two flies may be seen to make contact and rapidly dart out of the group. The purpose of *T. notata* gathering in such numbers in autumn appears to be for courtship and possibly mating. Sexual union appears to be of short duration.

When the air cooled and light intensity diminished, the group sought shelter in a conservatory, possibly attracted by warm air issuing from two ventilators. Some continued their flight inside for a while before converging on the windows and crawling up the glass. At dusk they all aggregated at the corners of the window panes, each fly in contact with its neighbour. The opportunity was taken to discharge an aerosol containing a rapid knock-down insecticide, enabling the collection of the aggregation.

A gathering of this species of fly resumed again on 14th and 15th September, and each evening they were collected by the method described, so that the majority of the flies in this assembly were collected and counted, and totalled 10,370 individuals. Some flies were scattered over the foliage of plants and were not collected so that 12,000 individuals would be a fair approximation of the total size of this gathering. Very few flies nearby were also observed covering about an area of 120cm² in the west-facing corner of the wall next to the ceiling in a living room of a house at Llanfihangel-y-creuddyn. A very small gathering of about 200 were flying adjacent to another south-facing corner, of a wooden shed at a height of about 30m at Newent, Gloucestershire, on 10th October, on a calm, dry afternoon of hazy sunshine when the temperature was about 14°C.

As has been observed previously in such gatherings, a small wasp may be found among the flies and this was the case at Cnwch Coch. Single examples of female *Cyrtogaster vulgaris* W. and *Necremnus tidius* (W.) were identified by Dr R.R. Askew to whom the writer expresses his thanks.

Those T. notata that gather in heated domestic buildings in the autumn do not survive to escape into the open air, many dying between the window and secondary glazing in the upstairs bedroom at Cnwch Coch, a few days after entry.— Philip M. Miles, Werndeg, Cnwch Coch, Aberystwyth, Dyfed, Wales.

Conditions when assemblies of <i>Thaumatomyia notata</i> Mg. were observed September 1990							
Date	Time (BST) of assembly	Bar.mb	Temp.°C Screen	_	previous ours Max.	Relative % Humidity	
13.ix.	12.00	1026	19	10	21	75	
14.ix.	13.30	1026	21	9.5	23	76	
15.ix.	15.00	1027	20.5	6.5	20.5	79	

Weather conditions on 13th-14th hazy sunshine becoming overcast, calm. 15th humid, overcast, cooler, wind gusty N.E.f.6. After this change in the weather no flies were seen.

Males	Females	Total No. counted
52.65%	47.35%	10,370

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Welcome

We have great pleasure in welcoming two new members to the editorial team of the *Record* — John Owen and Adrian Spalding. Paul Sokoloff